



PROCEDURE

Cataract Scout Park – Flying Fox Tower



Issued with the authority of the Head of Risk and Commercial Manager of Scouts Australia NSW

		Head of Risk Signature	
Sponsor	Activities Manager, CSP	Commercial Manager Signature	
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Cataract Scout Park- Flying Fox Tower

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1 Location

The Flying Fox Tower is located at the end of Moore Road, next to the artificial rock climbing wall and the 'Soapy Water Dam'.

2 Aims of Challenge Valley

- To implement 'challenge by choice' by:
 - enabling participants to expand their comfort zones, take initiatives and stretch their limits. (Necessary information and details are provided so that all participants can make an informed decision whether to participate in the activity and to what point.)
 - respecting each individual's limits, strengths and weaknesses so that no participant is 'forced' to do anything outside their wishes.
 - encouraging others no matter what their decision.
- To understand the fear of heights and work through it with determination and communication.

3 Pre-Activity Checks

- Check weather forecast as below.
- Check the activity site for hazards (fallen trees, branches, excessive leaves, snakes, etc.).
- Ensure **liability forms** have been signed and participants are present during the Essential Briefing.
- Recommended minimum age of participants is 8 years old. Participants must at least be able to fit in the harness correctly to partake in activity.

Weather conditions appropriate

- A BOM Weather check should be done prior to this activity
- Activity **cannot** be conducted during lightning storms or in winds gusting over 80kmph.
- In the case of a severe weather warning being issued for the area, the Program Manager, or staff in charge, must document justification of their decision if they choose to continue.
- Specific consideration must be given to:
 - Water on climbing surfaces making them slippery.
 - Mud/sand/soft fall causing damage to equipment.
 - General health and wellbeing of the group (it is extremely important to consider the effects of the weather on the participants, not only on the infrastructure and equipment).

Medical

- Obtain briefing from Supervising Adult/ Teacher on particular medical needs for each group.
 - Instructor must carry a first-aid kit at all times, located in the office.
 - Maximum weight of any individual on the activity is 120Kgs. If 110kg or over must act with caution.
- NB:** Instructor must have current first-aid qualifications.



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Supervision

- 1 Qualified Activity Instructor
- 1 Supervising Adult/Teacher
- 1 Assisting Activity Instructor

Equipment

- 8 participant full body harness
- 8 participant helmets
- 1 instructor harness*.
- 2 instructor helmet*.
- 2 long static flying fox ropes.
- 2 static backup ropes.
- 2 edelrid eddys
- 2 flying fox trucks
- 8 tri-lock carabiners
- 1 ladder (remains permanently at the activity).
- Instructor's safety line
 - 1 long black strop**.
 - 1 short static rope**.
 - 3 screw gate carabiners**.
- 2 participant safety lines, consisting of:
 - 2 static ropes
 - 6 screw gate carabiners
 - 4 pulleys
- 1 'telstra rope' (remains permanently at the activity).

Tower Capacity

Recommended limit is 18 people for the top platform. It may hold 37 people in an emergency. Recommended limit is 6 people for each staircase platform. They may hold 10 people in an emergency.

4 Activity Setup

- Ensure that all participant harnesses and helmets are set up neatly in the Flying Fox shipping container.
- Ladder to be placed to the side of the black rubber mat where the participants dismount. Ensure this ladder is not in the line of travel and will not create a trip hazard.
- Unlock the Flying Fox Tower and make sure the access steps and platforms are safe and in good working order.
- Perform a routine visual check of the Flying Fox Tower prior to use and report any hazards to the Program Manager, or staff in charge, immediately.
- Ensure that the 'drop zone' is clear prior to the start of the session.
- Ensure that your own safety is first priority during the set-up procedures and must make yourself 'safe' as soon as possible.

**If an instructor uses their own personal gear, it must be in proper condition and maintained to the same equipment standards as Cataract Scout Park.*



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***for instructor safety*

- Untie the 'telstra rope' on the gates used for the Flying Fox and allow the rope to hang towards the ground.
- Ensure that all of the following Flying Fox equipment has been inspected and is in safe working order before use. If any equipment is unsafe to use, it must be reported to the Program Manager immediately and taken out of service to prevent anyone else using it:
- Anchors – check for excess wear, alteration of original shape, surface cracks, sharp edges, burrs, corrosion or heat damage.
- Belay device (Edelrid Eddy) – check as for anchors and that the device is operating in accordance with the manufacturer's recommendations.
- Carabiners – check as for anchors and belay device.
- Ropes/Belay slings – check, by 'flaking' the rope out, for abrasion, glossy or glazed areas, signs of melting, inconsistent diameter, discolouration, inconsistency in texture and stiffness.

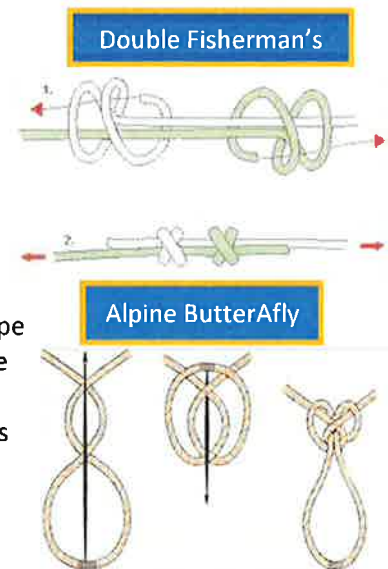
Instructor safety

- Loop the long black strop twice over the metal bar between the Flying Fox cables.
- Attach a carabiner through both ends of the long black strop.
- Tie a 'figure 8 on the bight' in both ends of the white static rope and connect one end of the rope to the carabiner that is now on the long black strop. Clip a second carabiner into the other end of the white rope. 'Figure 8' is to be dressed and loaded.
- Tie an alpine butterfly knot into the white rope to create a 'short clip' and attach a carabiner.
- Wear a helmet at all times when on the tower.

Participant safety

- See images 1.1, 1.2, 1.3 & 1.4
- Clip a carabiner and pulley to each of the permanent eye bolts nearest the flying fox gates.
- Clip a further two carabiners and pulleys to the permanent eyebolts that are directly opposite the Flying Fox cables.
- Follow the instructions below to create two separate safety lines for each side of the Tower:
- Feed one of the safety line static ropes through the tops of two pulleys that are opposite each other and tie the ends of the rope together using a 'double fisherman's knot'. Ensure there is at least one hand span's length of tail in each end of the rope.
- Create a large bight in the rope directly next to the 'double fisherman's knot' and tie an 'alpine butterfly knot' to remove as much slack as possible from the system. Attach a screw gate carabiner to the loop of the alpine butterfly knot', for the participants to clip into.
- Repeat all the above for the second side of the Tower.

IMAGE 1.1



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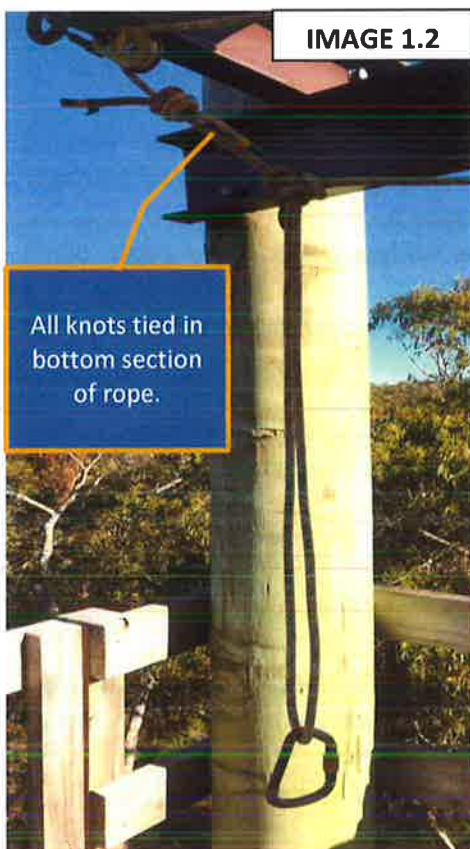
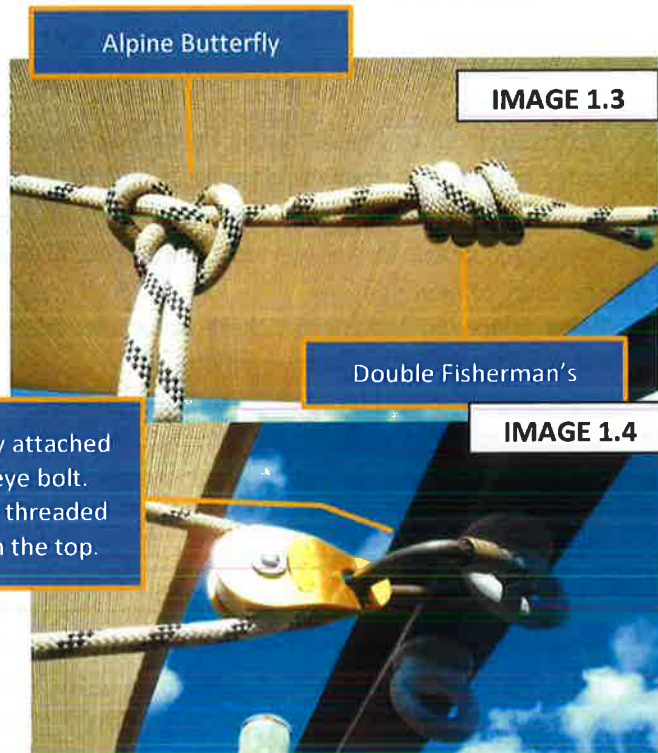


IMAGE 1.2

All knots tied in bottom section of rope.



Alpine Butterfly

IMAGE 1.3

Double Fisherman's

IMAGE 1.4

Pulley attached to eye bolt. Rope threaded from the top.

Flying fox set-up

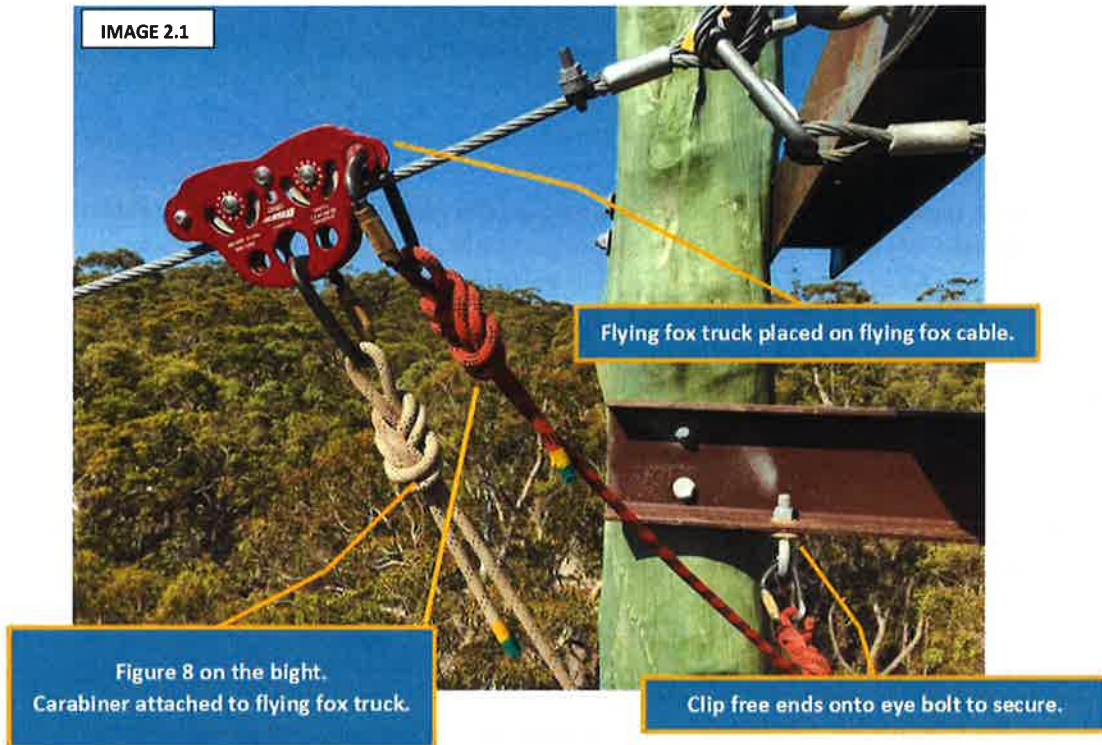
- See image 2.1
- Follow the instructions below for each side of the Tower to complete the dual Flying Fox.
- Tie a 'figure 8 on the bight' in both ends of one of the backup ropes. Ensure that there is a hand span's length of rope left at both ends. **Ensure the figure 8 is loaded and dressed.**
- Attach one end of the backup rope, via one of the tri-lock carabiners, to the permanent eye bolt closest to the Flying Fox cable.
- Take one of the long flying fox ropes and tie a 'figure 8 on the bight' in one end, and ensuring there is a hand span's length of rope. Attach a tri-lock carabiner to the end of the figure 8 knot.
- Correctly thread the Edelrid Eddy onto the long rope, approximately one metre from the end with the 'figure 8 on the bight', and attach the Edelrid Eddy via a tri-lock carabiner, to the same permanent eye bolt used for the white backup rope.
- Place one of the 'flying fox trucks' on the Flying Fox cable and secure the 'truck', through its middle attachment point, with the carabiner that is on the end of the long rope. Orientate the carabiner correctly.
- Attach the backup rope to the 'truck', through its closest attachment point, via a tri-lock carabiner.
- Tie a 'stopper knot' in the free end of the long rope ensuring there is a hand span's length of rope left.



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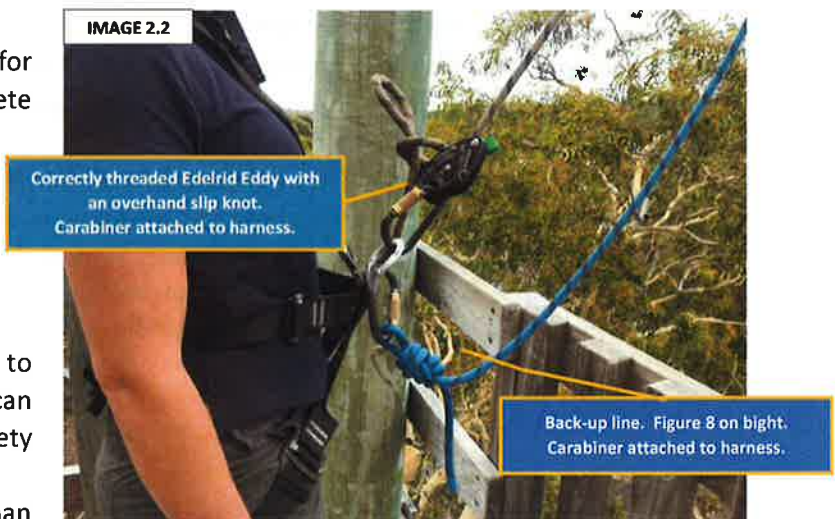
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- Repeat all the above for the second side of the Tower.



Attaching Participants

- See image 2.1
- Follow the instructions below for each side of the Tower to complete the dual Flying Fox.
- Attach participant to both the back-up line and the belay line with the carabiners opposing and inverted. Pull the slack of the belay line and add in a slip knot.
- Once participant is connected to both belay and backup line they can be detached from the tower safety line.
- Ensure the belay line is tighter than the backup line and the spare rope of the belay line is handed to the participant.



Qualified Activity Instructor's Role

1. The Qualified Activity Instructor must be signed off on induction and competent in operating the Flying Fox before taking responsibility for the session.



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2. They must ensure all essential briefings have been conducted before the activity commences (see 'Essential Briefing' below).
3. They should be up on the tower at all times during the activity, and if they leave the tower, all participants must also leave.
4. During the activity session the Qualified Activity Instructor will need to complete the following for each side of the dual Flying Fox system:
 - Ensure that each participant is clipped into a safety line immediately they reach the top of the staircase.
 - Perform a head to toe check before each participant is allowed to attempt the Flying Fox. If the participant fails the check they must return to the level below, to correct the problem.
 - Clip each participant into the Flying Fox system correctly.
 - Visually check the Flying Fox and 'drop zone' before setting each participant off.
 - Reset the Flying Fox system by pulling up the 'telstra rope' once the participants has tied it to the ends of the long rope.

NOTE: The Instructor connecting the participants to the Flying Fox system must check the setup of the activity before their session begins regardless of who set it up and how many sessions have been run already

Assisting Activity Instructor's Role

Work with the Supervising Adults/Teachers to ensure the safe lowering of participants from the system as follows:

- The orange rope is passed down to the Assisting Activity Instructor and the participant is pulled up to the black rubber mat to be lowered.
- The carabiner with the white backup rope is removed from the participant's harness.
- The orange rope is pulled to remove the overhand slip knot, ensuring that the Gri-Gri II does not hit the participant in the face.
- The black lever on the Gri-Gri II is used to lower the participant gently to the ground.
- The carabiner with the Gri-Gri II is removed from the participant's harness.
- The participant is instructed to take the orange rope back to the Flying Fox Tower and to push the stopper knot through the loop in the 'telstra rope' and then release the ropes, so the Qualified Activity Instructor can reset the system.

5 Essential Briefing

Supervising adult /Teacher's role

- A Supervising Adult/Teacher works in conjunction with a Qualified Activity Instructor and does not assume responsibility for technical aspects of the activity.
- Supervising Adults/Teachers are responsible for supervising and should be aware that they have a duty of care for all participants.
- The Supervising Adult/Teacher is expected to:
 - Be a role model and exemplar for the participants and follow all safety rules.



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- Assist with the fitting of helmets and harnesses as necessary.
- Supervise the participants on the ground during the activity.
- Provide positive reinforcement and support for all levels of achievement.

NOTE: If time allows for the Supervising Adults/Teachers to participate they should wait until the end of the session.

Participant Briefing

The following sets out the essential points that must be explained before any participant is allowed to attempt the activity.

It is the responsibility of the Qualified Activity Instructor to ensure that all participants have fully understood the Essential Briefing before commencing the activity. It is the decision of the Instructors regarding whether or not a participant is ready to take part in the activity safely.

6 Activity Instructions

General

- Introduce yourself, assisting instructor and activity.
- Explain, as appropriate, the following:
 - the 'aims' of the activity and what 'challenge by choice' means (see 'Aims' section of this document).
 - the participants will be stepping off the top of the tower at a height of 13 metres and will be sliding down the cable to the other end.
- Instruct the participants to:
 - Remain in the shipping container at all times until ready to ascend the tower.
 - Not to stand in the 'drop zone' underneath the cables.
 - Remain in the shipping container to put on the harnesses and helmets.
- Explain the following:
 - Once a participant has put on a harness and helmet, they are to walk in a straight line down and BEHIND the tower into the open door.
 - There is to be only one person at a time on each staircase.
 - Participants are to wait at one level below the top to be called up by the Instructor.
 - (NB: In an evacuation or other emergency situation, each staircase platform is capable of supporting 10 people and the top desk is capable of supporting 37).
 - All hands, cameras and the like must be kept INSIDE the tower at all times.
- You may like to explain that, because they are wearing a full-body harness, they can go upside down if they wish but must ensure that they don't do this immediately or they may bump their heads on the tower.



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Helmet

- Explain that all hats and hair clips etc. must be removed and long hair must be tied in a low pony tail at the base of the neck.
- Explain 'happy turtle': if helmet is ever put down, it must be placed upright, and not on its 'shell', to avoid damage to the helmet.
- Hold up a participant's helmet and show them how to identify the front by the 'Camp' brand name.
- Show them the rear adjustment strap and how to tighten/loosen the helmet as follows:
 - o push the strap towards the centre of the helmet,
 - o estimate head size and push the strap together, or pull it apart, until the size looks about right.
 - o place the helmet on head and adjust further, as above, if necessary.
- Do a 'shake test': shake your head around or hold your head upside down to show the helmet can stay on while the chin strap is not done up (the rear adjustment strap holds it on tight).
- Explain that there should be two fingers distance between the eyebrows and the lip of the helmet.
- the chin strap up and explain that, just like a bike helmet, they should be able to run two fingers inside the strap from ear to ear to ensure that the helmet is neither too tight nor too loose and so the strap won't be able to pass over their chin.

Full body harness

See image 3.1 and 3.2)

- Show the participants the key features of the full-body harness that they will be wearing.
 - o 1 waist loop,
 - o 2 leg loops,
 - o 1 'seat belt' clip,
 - o 2 shoulder straps,
 - o 4 buckles,
 - o 1 orange separator,
 - o 1 silver harness loop
- Make it extremely clear that the harness must not touch the ground to stop dirt getting into the clip and preventing it from functioning correctly.
- Demonstrate the correct fitting of the participant's harness as follows:
 - o Show them how to unclip the 'seat belt' clip. Suggest they give the unclipped shoulder straps to another participant to ensure that they are kept out of the dirt.
 - o Show them how to hold the harness so it is not tangled (four buckles pointing to the sky).
 - o Show them how to step into the harness (like a pair of shorts).
 - o Explain that the silver harness loop must be at the level of their belly button and the waist loop MUST be above their hip bones.
 - o Instruct them to tighten the waist strap evenly first, and then both leg loops.



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- Show them how to check that the harness is tight enough, using the paper rock method: Create a flat hand (paper) and slide it down the side of your harness, then make a fist (rock). If they can pull the fist back out of the harness without flattening their hand, then they will need to tighten the waist loop more.
- Instruct them to ask another participant, if they wish, to help them pass the shoulder straps over their head. They must then clip the straps in above the silver harness loop.
- Instruct them to tighten the shoulder straps so that the straps are firm and won't come off the shoulders. They should ensure that the orange plastic separator is between the shoulder blades.
- Instruct them to tuck all extra straps away in the black elastic loops



7 Rescue

In the case of a participant becoming 'stuck' on the system, such as being lowered onto the backup rope or getting something caught in the Edelrid Eddy, the ladder is to be used to de-weight the system and disconnect the backup line from the participants harness. The participant is to then weight the system, remove the ladder out of lowering zone; so the participant can continue to be lowered as normal, with the Edelrid Eddy, to the ground.

8 Debriefing

As Activity Instructors we assist participants in understanding and realizing what they have achieved and how it can apply in everyday life. A debrief works best if the participants feel they can contribute most of the input and ideas themselves.

- There are many ways to perform debrief/reflection. You may like to:
 - Address aims (see page one) and discuss the participants' successes and challenges.
 - Discuss challenging their fear of heights, their personal choices, and respect for other people's choices as to limits, strengths and weaknesses.
 - What was their perception of the Flying Fox at the start ("where were you in your comfort zone")? What are their feelings towards it now ("has your comfort zone expanded")?
 - Discuss the teamwork and trust elements of the activity and how it can apply in everyday life.

9 Packing Up

On site

- Participants should fully loosen the harnesses and hang them back in the shipping container along with the helmets (place on benches).
- During the pack up at the top of the Flying Fox Tower, ensure that the Instructor remains safely attached.
- All Flying Fox ropes must be pulled to the top of the tower and placed in the transport bag/box.
- All hardware must be accounted for and placed in transport bag/box along with the ropes.

Final pack up at Equipment Shed

- Complete Activity Equipment Log as per its directions.
- Any issues/problems with any equipment should be notified as soon as possible to the Program



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Manager.

- Ensure all equipment is packed away appropriately and all rubbish has been put in the bin.
- If necessary, an Incident, Accident and Near Miss Report Form must be filled out (*located in the green instructor's folder or in the office*). Any completed forms must be handed to the Program Manager at the earliest convenience.

10 Appendices

- Briefing Cards



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<p style="text-align: center;">Version 5</p> <p style="text-align: center;">Cataract Scout Park</p> <h2 style="text-align: center;">Flying Fox</h2> <p style="text-align: center;">Briefing cards</p>	<p><i>Flying Fox - Page 1 of 8 - Version 5</i></p> <p>These briefing cards have been designed to assist in jogging your memory during briefs and sessions.</p> <p>Anything in bold is a requirement as per our Standard Operating Procedures.</p> <p>Everything else is suggestions and will depend on the group and its ability if you include it or not.</p> <p>These are to be used in conjunction with the Standard Operating Procedures as not all information is included</p>	<p><i>Flying Fox - Page 2 of 8 Version 5</i></p> <p style="text-align: center;"><u>INTRODUCTION</u></p> <ul style="list-style-type: none"> ➤ Explain how the flying fox works. ➤ They will be attached to two ropes. Steps off the 13m tower and slide all the way to the other end. <p style="text-align: center;"><u>BOUNDARIES</u></p> <ul style="list-style-type: none"> ➤ Participants must remain in container at all times until ready to ascend tower. ➤ Do not stand in 'drop zone' under cables
<p><i>Flying Fox - Page 3 of 8 Version 5</i></p> <p style="text-align: center;"><u>HARNES</u></p> <ul style="list-style-type: none"> • Demonstrate, as appropriate to session, to the participants how to correctly fit a full-body harness. • Stay in shipping container to put on harness • Ensure all loops are loosened. • Keep out of dirt • Empty pockets. • Unclip shoulder strap and hand to friend. <p style="text-align: center;">All buckles to the sky (4)</p>	<p><i>Flying Fox - Page 4 of 8 Version 5</i></p> <p style="text-align: center;"><u>HARNES cont.</u></p> <ul style="list-style-type: none"> • Step into harness – check no twists. • Find waist – above belly button. • Tighten waist first (evenly). • Tighten legs. • Paper / rock check. • Shoulder straps clipped in and positioned correctly. • Won't come off shoulders 	<p><i>Flying Fox - Page 5 of 8 Version 5</i></p> <p style="text-align: center;"><u>HELMET</u></p> <ul style="list-style-type: none"> • Demonstrate, as appropriate to session, to the participants how to correctly fit a helmet. • Unhappy turtle. • Hats and hairclips off. • Long hair tied low. • Brand name to the front. • Strap at back – sizing. • Shake test. • Safety salute <p style="text-align: center;">Two fingers under chin strap & won't come off.</p>
<p><i>Flying Fox - Page 6 of 8 Version 5</i></p> <p style="text-align: center;"><u>TOWER RULES</u></p> <ul style="list-style-type: none"> • Once harness and helmet is checked, walk in straight line down and BEHIND tower into the door. • One person at a time on each staircase. • Maximum 6 people per platform. • Wait at the level below the top to be called up. <p style="text-align: center;">Keep all hands etc. INSIDE the tower</p>	<p><i>Flying Fox - Page 7 of 8 Version 5</i></p> <p style="text-align: center;"><u>DESCENT</u></p> <ul style="list-style-type: none"> • 3 ways to go down. <ul style="list-style-type: none"> -Economy class (step off) -Business class (jump off) -First class (Instructor hold ropes secure, participant stands backwards, eyes closed, arms crossed, instructor lets go of ropes) • Full body harness means you can go upside down. (count to 2 before flipping) • Explain how lowering from the system works. 	<p><i>Flying Fox - Page 8 of 8 Version 5</i></p> <p style="text-align: center;"><u>PACK UP</u></p> <ul style="list-style-type: none"> • The Flying Fox System is reset. • All harness is correctly loosen and placed on hook ready for next group.